

STUDIES IN THE EUPATORIEAE (ASTERACEAE). CX.

ADDITIONS TO THE GENUS, CAMPULOCLINIUM.

R. M. King and H. Robinson
Smithsonian Institution, Washington, D.C. 20560.

The recent survey of the genus Campuloclinium (King & Robinson, 1972) recognized ten species all showing the characteristic enlarged ring-like carpodium and distinctly conical receptacle. Two previously overlooked species are added here on the basis of material collected by Dr. Howard Irwin during the 1969 New York Botanical Garden expedition to the Planalto of Brazil. Both of the species to be added have certain peculiarities of interest.

Campuloclinium barrosoana (Barroso) R.M.King & H.Robinson, comb. nov. Trichogonia barrosoana Barroso, Arquivo Jard. Bot. Rio de Janeiro 11: 13. 1951. Brazil.

In the recent survey of the genus Trichogonia (King & Robinson, 1972), T. barrosoana was excluded on the basis of certain described features, the lack of hairs on the corolla lobes and the presence of a conical receptacle. Comparison was made to the genus Platypodanthera, a genus related to Trichogonia. Platypodanthera had seemed very distinct in its totally glabrous stems, leaves, involucre, corollas and achenes, by its long-petiolate leaves and by its broad anther collars. Specimens of T. barrosoana have now been seen and differences from both Trichogonia and Platypodanthera have been confirmed. The new specimens show two unexpected features, a large ring-like carpodium and small hairs and papillae on the base of the style. All features of T. barrosoana agree with the genus Campuloclinium and the species has something of the habit of C. purpurascens (Schultz-Bip.) R.M.King & H.Robinson. The broadly ovate to deltoid sessile densely pubescent leaves are totally distinctive along with the short blunt tipped pappus setae and the blunt setae on the ribs of the achenes.

Campuloclinium irwini R.M.King & H.Robinson, sp. nov.

Herbae erectae ca. 1 m altae non ramosae. Caules teretes leniter striati grosse hirsuti. Folia opposita indistincte breviter petiolata, petiolis 1-3 mm longis, laminis oblongo-ellipticis 3-6 cm longis 0.7-2.5 cm latis acutis margine serratis base acutis supra et subtus hirsutis glanduliferis subtus densioribus, glandulis sessilibus. Inflorescentiae laxae cymosae, pedicellis dense hirtellis. Capitula 7-8 mm alta alba; involucri squamae 20-25 subimbricatae subaequilongae plerumque 5.0-5.5 mm longae 1-2 mm latae anguste oblongae vel ovatae extus hirsutae et glanduliferae apice acutae virides base incrassatae carnosae albae; receptacula peralae conica. Flores ca. 45-50 in capitulo; corollae 2.5 mm longae vix infundibulares extus glanduliferae, lobis vix longioribus quam latioribus intus laevibus extus vix papillosis; filamenta antherarum in parte superiore ca. 250 μ longa, appendices ca. 125 μ longae 200 μ latae; styli inferne glabri non nodulosi, appendicibus late linearibus leniter mamillatis; achaenia 2.0-2.5 mm longa in costis dense setifera, setis argutis; pappi setae ca. 30 breves plerumque ca. 1.5 mm longae, cellulis apicalibus subacutis. Grana pollinis ca. 18-20 μ diam. breviter spinosa.

Type: BRAZIL: Minas Gerais: Serra do Espinhaço: Cerrado slopes, ca. 48 km west of Montes Claros, road to Agua Boa. Elevation 950 meters. February 25, 1969. Irwin, dos Santos, Souza, da Fonseca 23865 (Holotype US!).

The new species has a habit nearly identical with Campuloclinium burchellii (Baker) R.M.King & H.Robinson showing the same general leaf shape and lax inflorescence with comparatively small heads. Differences between the two species are sufficient to make close relationship doubtful, however. The new species is unique in the genus in the fleshy bases of the phyllaries, the very high conical receptacle and the lack of hairs or papillae on the base of the style. The short pappus setae are also rather distinctive. The very high conical almost cylindrical receptacle has caused the specimens to be compared with Eupatorium hoffmanniana Hier. but the latter is a relative of the genus Chromolaena which differs in its flattened achenes, corolla lobe papillosity and anther collar structure. Though clearly a Campuloclinium, the bare style base and high receptacle of the new species

suggest possible subgeneric distinction.

References

- King, R.M. & H. Robinson 1972. Studies in the Eupatorieae (Asteraceae). XC. The genus, Campuloclinium. *Phytologia* 24: 170-172.
- King, R.M. & H. Robinson 1972. Studies in the Eupatorieae (Asteraceae). XCII. The genus, Trichogonia. *Phytologia* 24: 176-179.

Acknowledgement

This study was supported in part by the National Science Foundation Grant GB 20502 A #1 and A #2 to the senior author.